



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

2

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,718	10/06/2003	Rodney E. Smith	SMTT 321A	2653
23581	7590	04/13/2006	EXAMINER	
KOLISCH HARTWELL, P.C. 200 PACIFIC BUILDING 520 SW YAMHILL STREET PORTLAND, OR 97204			PECHHOLD, ALEXANDRA K	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/680,718	<b>Applicant(s)</b> SMITH ET AL.	
	<b>Examiner</b> Alexandra K. Pechhold	<b>Art Unit</b> 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. **Claims 1-6, 9-11, 14, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Faircloth, Jr. (US 5,820,751).**

Regarding claim 1, Faircloth discloses an apparatus comprising a conduit terminator (seen as pipe coupling 38 in Fig. 2), operable to terminate a conduit with an inlet opening (seen as orifice 44 in Figs. 5 and 6). Faircloth discloses a solid object diverter (seen as frame 52 and screens 64, 64' in the windows 63, 63') comprising at least one solid wall surround the inlet opening (seen as the central part of frame 52, where the reference numeral 52 is pointing in Fig. 5, that surrounds the orifice 44) which defines a liquid admitting cavity (seen as the interior of frame 52, since liquid can enter through the holes in the screens 64, 64') about the inlet opening (seen as about orifice 44 in Figs. 5 and 6) to impede solid objects from entering the inlet opening while permitting entry of liquid into the cavity. Faircloth discloses a positioner (seen as skimmer device 20 in Fig. 2). The method of extracting liquid from a body of liquid is disclosed in column 2, lines 66-67 and column 3, lines 1-12.

Regarding claim 2, Faircloth discloses a housing, seen as entire drain head (50) in Figs. 2 and 5.

Regarding claim 3, Faircloth illustrates in Figs. 2 and 5 the screens (64, 64') on windows (63, 63') in the drainhead (50).

Regarding claim 4, Faircloth depicts the drain head (50) having a wall, seen as frame (52) defining a cavity opening, seen as windows (63, 63') in Fig. 5.

Regarding claim 5, Faircloth discloses a gas vent, seen as air vent (36) in Figs. 2 and 5.

Regarding claims 6, 9, and 14, Faircloth discloses floats on opposite sides of the diverter, seen as floats (70) in Fig. 2, which can be considered as having hydrodynamic shapes.

Regarding claim 10, Faircloth discloses an object deflector seen as debris guards (74, 74') in Fig. 2.

Regarding claim 11, the diverter of Faircloth, seen as frame (52) and screens (64, 64') in windows (63, 63'), can be considered as having a hydrodynamic shape.

Regarding claim 19, Faircloth discloses the apparatus of claim 1 (as discussed above), which can be used in a method of guiding fish.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3671

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4      Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faircloth, Jr. (US 5,820,751) as applied to claim 2 above, and further in view of Truebe et al (WO 98/56241).**

Regarding claim 7, Faircloth discloses the limitations of the claimed invention except for a turbulence producing mechanism such as a venturi accelerator formed by the housing or in the housing. Truebe teaches the use of a current generating apparatus seen as a propeller. Truebe notes that current generating devices are used to guide fish away from plant intakes, pumps, turbines, etc. (page 1, lines 21-25 and page 2, lines 15-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Faircloth to include a turbulence producing mechanism as taught by Truebe, since Truebe states on page 1, lines 21-25 and page 2, lines 15-22 that current generating devices can be used to protect fish by guiding them away from hazardous intake structures.

Regarding claim 8, Faircloth discloses at least one blocking member seen as cover (62) on drain head (50) in Fig. 5.

**5      Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faircloth, Jr. (US 5,820,751).** Faircloth discloses the limitations of the claimed invention except for a teardrop shape. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the shape of the apparatus of Faircloth to be a teardrop, since it is known in the art of flotation devices

Art Unit: 3671

that a teardrop shape provides greater hydrodynamic capabilities, thereby having less resistance to traveling across a body of water.

**6 Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faircloth, Jr. (US 5,820,751) as applied to claim 2 above, and further in view of Araki et al (US 5,081,582).** Faircloth discloses the limitations of the claimed invention except for a data acquisition unit. Araki teaches adjusting the position of a water curtain device that prevents dispersion of dangerous gas leakage by detecting position, wind direction, and tidal current in order to most effectively locate the water curtain (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Faircloth to include a data acquisition unit as taught by Araki, since Araki notes in the abstract that acquiring environmental data allows the water curtain device to be adjusted so that it can most effectively operate under the influence of environmental conditions.

**7 Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faircloth, Jr. (US 5,820,751) as applied to claim 14 above, and further in view of Smith (US 5,020,940).**

Regarding claim 15, Faircloth discloses the limitations of the claimed invention except for first and second outer fins and respective fin spacers. Smith teaches fins (17, 18) extending outward from the boom structure as shown in Fig. 5. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Faircloth to include first and second outer fins with fin

Art Unit: 3671

spacers as taught by Smith, since it is known in the art of floating devices that fins are advantageous hydrodynamic features.

Regarding claim 16, a buoyant medium could be seen is Faircloth as the float (70) or the body of water.

8 **Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faircloth, Jr. (US 5,820,751) and Smith (US 5,020,940) as applied to claim 16 above, and further in view of Sanders (US 5,491,922).** Faircloth and Smith disclose the limitations of the claimed invention except for at least one of the float comprising a watertight control housing. Sanders teaches floatable booms having a drive device (26) attached to the forward end of each floatable boom (12), serving to propel the boom through the water and provide remote control (Col 8, lines 19-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Faircloth including the fins of Smith to have a watertight control housing as taught by Sanders, since Sanders states in column 8, lines 19-23 that a drive device provides remote operation to propel the boom through the water, which therefore provides control of the location of the device.

9 **Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faircloth, Jr. (US 5,820,751) as applied to claim 2 above, and further in view of Harding (US 4,518,495).** Faircloth discloses the limitations of the claimed invention except for a tether connector. Harding teaches a pool skimmer utilizing a harness, such as ropes (5, 5) to control the movement of the framework (Col 1, lines 60-68). It would have been obvious to one having ordinary skill in the art at the time the invention was

made to modify the apparatus of Faircloth to include tether lines as taught by Harding, since Harding states in column 1, lines 60-68 that ropes may control the movement of the skimming device.

### ***Response to Arguments***

10. Applicant's arguments filed 2/8/06 have been fully considered but they are not persuasive.

Applicant argues that Faircloth does not meet the claimed recitation in claim 1 of "a solid object diverter comprising at least one solid wall surrounding said inlet opening to define a liquid admitting cavity about said inlet opening". The Examiner is maintaining the rejection on the basis that the solid wall (seen as where reference numeral 52 points to in Fig. 5) is part of the structure the Examiner considers the solid object diverter (seen as frame 52 and screens 64, 64' in the windows 63, 63'). Figure 5 of Faircloth also shows the solid wall (seen as the solid cylindrical structure where reference numeral 52 points to in Fig. 5) surrounds the inlet opening (which the Examiner views as orifice 44 seen in Figs. 5 and 6) to define a liquid admitting cavity about the inlet opening (seen as interior of the cylindrical solid structure 52 in Fig. 5 where liquid can pass about the orifice 44). The applicant cites several definitions of "solid", which the Examiner has no disagreement with. The applicant appears to be arguing beyond the scope of the claims, since the Examiner contends that Faircloth clearly shows a solid wall (seen as the solid structure of frame 52 where the reference numeral points to in Fig. 5) that surrounds the orifice (44) to define a liquid admitting



Art Unit: 3671

cavity (seen as the interior of frame 52) about the orifice (44), as Figures 5 and 6 of Faircloth support.

### ***Conclusion***

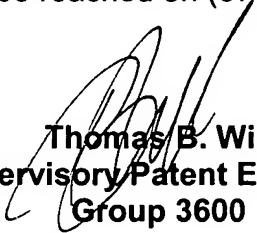
11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3671

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (571) 272-6994. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (571) 272-6998. The fax phone number for this Group is (571) 273-8300.



**Thomas B. Will**  
**Supervisory Patent Examiner**  
**Group 3600**

AKP  
4/10/06